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10/530,594	05/19/2005	Daniel Lecomte	27592-01111-US	7637
30678 7590 02/12/2010 CONNOLLY BOVE LODGE & HUTZ LLP 1875 EYE STREET, N.W. SUITE 1100 WASHINGTON, DC 20006				
EXAMINER				
POPHAM, JEFFREY D				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/530,594

**Applicant(s)**

LECOMTE ET AL.

**Examiner**

JEFFREY D. POPHAM

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 43-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 43-69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Remarks***

Claims 43-69 are pending.

***Response to Arguments***

1. Applicant's arguments with respect to claims 43-69 have been considered but are moot in view of the new ground(s) of rejection.

With respect to the 101 rejections, argues that the amendment to claim 64, including "at least one communicative coupling to couple the synthesis system to an item selected from the group consisting of a memory device, a playback device, and a communication network" recites structure in the claim. However, this communicative coupling is not defined in the application. The only time "coupling" is ever mentioned is with respect to components of an audio stream (paragraph 43 on page 10 of the original specification). In the broadest reasonable interpretation, a communicative coupling could be physical (network interface card, physical port, etc.), as well as logical (logical port, software required to communicate over a network, etc.). In order to be statutory, it has to be clear that this communicative coupling is hardware. Figure 1 does not show what the communicative coupling would be, but merely provides a connection from the modified main stream to network 4 and another connection from the complementary streams to network 5. As the streams are logical, rather than physical, this connection appears to be a logical connection. In order to be statutory, it must be made clear that the communicative coupling is a physical component, such as a NIC (network interface card) or the like.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 64 and 67-69 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As just described in the response to arguments, it is not clear whether the communicative coupling of claim 64 is physical or logical, as the communicative coupling is not defined in the instant application and the broadest reasonable interpretation includes both logical couplings as well as physical couplings. As an apparatus must include at least one physical component to be statutory, it must be made clear that the communicative coupling is a hardware component (such as a network interface card, for example). Alternatively, claim 64 could be amended to provide for a variety of other hardware components, such as the playback device of claim 65 or the at least one buffer memory of claim 66, which each provide hardware within the apparatus of claim 64.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

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said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 43-47, 49, 53, 56, 57, 63-66, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra (U.S. Patent 5,953,506) in view of Buxton (U.S. Patent 6,937,730).

Regarding Claim 43,

Kalra discloses a method of transmitting audio information, the method comprising:

Modifying an original audio stream having audio information encoded into encoded values into a modified stream and complementary information, wherein a format of the modified stream corresponds to a format of the original audio stream, wherein the modified stream is distorted with respect to the original audio stream by modifying at least one encoded value of an audio block of the original audio stream, and wherein the complementary information provides information to permit a decoder to reconstitute the original audio stream from the modified stream (Abstract; Column 1, line 66 to Column 2, line 49; Column 3, line 66 to Column 4, line 32; and Column 5, lines 25-29; converting the original stream into a base stream and additive streams for scalable media delivery, for example);

Transmitting the modified stream to the target equipment (Column 4, lines 14-46; transmitting selected streams, including the base stream, to the device, for example); and

Transmitting at least a subset of the complementary information to the target equipment (Column 4, lines 14-46; and Column 5, lines 25-29; transmitting selected streams, including additional streams, to the device, for example);

But does not explicitly disclose that the audio stream is encoded into audio blocks that include the one or more encoded values.

Buxton, however, discloses that the audio stream is encoded into audio blocks that include the one or more encoded values or that the modifying is performed on at least one encoded value of an audio block (Abstract; Column 3, lines 3-20; and Column 3, line 55 to Column 4, line 18; the audio content including a stream of audio samples, for example, such samples corresponding to encoded audio blocks). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the conditional access system of Buxton into the scalable media delivery system of Kalra in order to provide different levels of masking to the content, such that a user must be authenticated and/or authorized for an appropriate level before the content associated with that level may be revealed, thereby concealing objectionable content from users that should not be allowed to access such objectionable content.

Regarding Claim 56,

Claim 56 is a system claim that corresponds to method claim 43 and is rejected for the same reasons.

Regarding Claim 44,

Kalra as modified by Buxton discloses the method of claim 43, in addition, Kalra discloses that transmitting at least a subset of the complementary information to the target equipment comprises accessing a data profile of the target equipment; and determining, based on the data profile, the subset of the complementary information to be transmitted to the target equipment (Abstract; Column 1, line 66 to Column 2, line 49; and Column 3, line 66 to Column 4, line 59).

Regarding Claim 57,

Claim 57 is a system claim that corresponds to method claim 44 and is rejected for the same reasons.

Regarding Claim 45,

Kalra as modified by Buxton discloses the method of claim 44, in addition, Kalra discloses that accessing a data profile includes accessing a data profile that comprises at least one component that relates to the target equipment and that is selected from the group consisting of payment data, preferences, environment, habits, and characteristics (Column 4, lines 47-59).

Regarding Claim 46,

Kalra as modified by Buxton discloses the method of claim 44, in addition, Kalra discloses that accessing a data profile comprises accessing at least a portion of the data profile that is retrieved from the target equipment (Column 16, lines 18-28).

Regarding Claim 47,

Kalra as modified by Buxton discloses the method of claim 44, in addition, Buxton discloses that accessing a data profile includes accessing a data profile that includes an indication of rights of a user to access content of the original audio stream (Column 3, lines 21-50; Column 5, line 17 to Column 6, line 43; and Column 8, lines 23-47; showing different ways of transmitting the data depending on characteristics of the receiver, authenticated user identification, and whether the channel is trusted or not (the combination of which defines the profile of the device, user, and channel). The distributor may send only CAMA data (content after mask applied), which corresponds to the modified stream or CAMA data along with an encrypted masked content and knowledge of how to reverse the masking, for example, depending on the profile of the user/device).

Regarding Claim 49,

Kalra as modified by Buxton discloses the method of claim 43, in addition, Kalra discloses that transmitting the modified stream and transmitting at least a subset of the complementary information



utilize a common transmission medium (Column 4, lines 14-59; and Column 5, lines 25-29).

Regarding Claim 53,

Kalra as modified by Buxton discloses the method of claim 43, in addition, Kalra discloses reconstituting, at the target equipment, an audio stream using the modified stream and at least a subset of the complementary information (Column 4, lines 14-46).

Regarding Claim 63,

Kalra as modified by Buxton discloses the system of claim 56, in addition, Kalra discloses that the audio information server further comprises at least one output buffer memory coupled to receive at least the modified stream from the analysis system (Figures 13-14; and Column 4, lines 14-59).

Regarding Claim 64,

Kalra discloses an apparatus for receiving transmitted audio information, comprising:

A synthesis system configured to receive a modified stream and at least a subset of a set of complementary information, wherein the modified stream and the complementary information are derived from an original audio stream having audio information encoded into encoded values, and configured to synthesize a reconstituted audio stream, wherein a format of the modified stream corresponds to a format of the original audio stream, wherein the

modified stream is distorted with respect to the original audio stream by modifying at least one encoded value of an audio block of the original stream, and wherein the complementary information provides information to permit a decoder to reconstitute the original audio stream from the modified stream (Abstract; Figures 12-14; Column 1, line 66 to Column 2, line 49; Column 3, line 66 to Column 4, line 59; Column 14, line 61 to Column 15, line 32; and Column 15, line 66 to Column 17, line 17); and

At least one communicative coupling to couple the synthesis system to an item selected from the group consisting of a memory device, a playback device, and a communication network (Abstract; Figure 2A; and Column 4, lines 14-32; the coupling between the server/stream management module to the user's multimedia device, for example);

But does not explicitly disclose that the audio stream is encoded into audio blocks that include the one or more encoded values.

Buxton, however, discloses that the audio stream is encoded into audio blocks that include the one or more encoded values or that the modifying is performed on at least one encoded value of an audio block (Abstract; Column 3, lines 3-20; and Column 3, line 55 to Column 4, line 18; the audio content including a stream of audio samples, for example, such samples corresponding to encoded

audio blocks). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the conditional access system of Buxton into the scalable media delivery system of Kalra in order to provide different levels of masking to the content, such that a user must be authenticated and/or authorized for an appropriate level before the content associated with that level may be revealed, thereby concealing objectionable content from users that should not be allowed to access such objectionable content.

Regarding Claim 65,

Kalra as modified by Buxton discloses the apparatus of claim 64, in addition, Kalra discloses a playback device coupled to the synthesis system to receive the reconstituted audio stream and to play corresponding audio on a listening device (Column 1, line 66 to Column 2, line 49; Column 3, line 66 to Column 4, line 59; and Column 15, line 51 to Column 16, line 17).

Regarding Claim 66,

Kalra as modified by Buxton discloses the apparatus of claim 64, in addition, Kalra discloses at least one buffer memory to receive and store the modified stream or the received at least a subset of the set of complementary information, wherein the at least one buffer memory is coupled to the synthesis system (Figure 24; and Column 24, line 50 to Column 25, line 6).

Regarding Claim 69,

Kalra as modified by Buxton discloses the apparatus of claim 64, in addition, Kalra discloses that the complementary information includes at least one function to be used by the synthesis system to synthesize the reconstituted audio stream from the modified stream and the at least a subset of the complementary information (Abstract; Column 1, line 66 to Column 2, line 49; and Column 3, line 66 to Column 4, line 59).

4. Claims 48, 50-52, 58, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra in view of Buxton, further in view of Saunders (U.S. Patent 7,290,057).

Regarding Claim 48,

Kalra as modified by Buxton does not explicitly disclose that transmitting the modified stream comprises storing the modified stream on a physical storage medium.

Saunders, however, discloses that transmitting the modified stream comprises storing the modified stream on a physical storage medium (Column 15, lines 20-31). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the media delivery system of Saunders into the scalable media delivery system of Kalra as modified by Buxton in order to allow the system to distribute different portions of a stream

via different communication means, provide additional scalability factors, such as language, and/or only allow usage of content to authorized entities.

Regarding Claim 58,

Claim 58 is a system claim that corresponds to method claim 48 and is rejected for the same reasons.

Regarding Claim 50,

Kalra as modified by Buxton does not explicitly disclose that transmitting the modified stream and transmitting at least a subset of the complementary information utilize separate transmission media.

Saunders, however, discloses that transmitting the modified stream and transmitting at least a subset of the complementary information utilize separate transmission media (Column 4, lines 42-62; Column 6, lines 28-55; and Column 13, lines 20-50). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the media delivery system of Saunders into the scalable media delivery system of Kalra as modified by Buxton in order to allow the system to distribute different portions of a stream via different communication means, provide additional scalability factors, such as language, and/or only allow usage of content to authorized entities.

Regarding Claim 51,

Kalra as modified by Buxton does not explicitly disclose that transmitting at least a subset of the complementary information utilizes a transmission medium different from that used for transmitting the modified stream.

Saunders, however, discloses that transmitting at least a subset of the complementary information utilizes a transmission medium different from that used for transmitting the modified stream (Column 4, lines 42-62; Column 6, lines 28-55; and Column 13, lines 20-50). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the media delivery system of Saunders into the scalable media delivery system of Kalra as modified by Buxton in order to allow the system to distribute different portions of a stream via different communication means, provide additional scalability factors, such as language, and/or only allow usage of content to authorized entities.

Regarding Claim 52,

Kalra as modified by Buxton and Saunders discloses the method of claim 51, in addition, Saunders discloses that the transmission medium utilized for transmitting at least a subset of the complementary information is selected from the group consisting of an analog telephone line, a digital telephone line, a digital subscriber line, a local radio loop, a digital audio

broadcasting channel, a commutated telephone network, and a wireless digital telecommunication network (Column 19, lines 12-40).

Regarding Claim 59,

Claim 59 is a system claim that is broader than method claim 52 and is rejected for the same reasons.

5. Claims 54 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra in view of Buxton, further in view of Blackketter (U.S. Patent 6,938,270).

Regarding Claim 54,

Kalra as modified by Buxton does not explicitly disclose that transmitting at least a subset of the complementary information includes transmitting at least one function to be used by the target equipment to reconstitute an audio stream from the modified stream and the at least a subset of the complementary information.

Blackketter, however, discloses that transmitting at least a subset of the complementary information includes transmitting at least one function to be used by the target equipment to reconstitute an audio stream from the modified stream and the at least a subset of the complementary information (Abstract). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the script trigger system

of Blacketter into the scalable media delivery system of Kalra as modified by Buxton in order to allow for interaction between an information resource and a user, provide a user with relevant information concerning the user's interests, and/or allow the system to keep such information up to date without the need to connect to the Internet or wait for the selected channel to deliver the latest information.

Regarding Claim 60,

Claim 60 is a system claim that corresponds to method claim 54 and is rejected for the same reasons.

6. Claims 55 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra in view of Buxton, further in view of Bantz (U.S. Patent 6,807,542).

Regarding Claim 55,

Kalra as modified by Buxton discloses the method of claim 43, in addition, Kalra discloses that transmitting at least a subset of the complementary information comprises transmitting all of the complementary information to the target equipment (Figures 15B2A-12B2D, 8/8 column; and Column 16, line 49 to Column 17, line 60; showing transmission of all additive streams; although one of ordinary skill in the art would understand that this could occur at the start of transmission, it does not appear to be explicitly recited);



and decreasing, over time, the amount of complementary information being transmitted to the target equipment (Column 25, lines 7-22; showing reduction of detail of transmitted data, which would result in the decrease of additive streams being sent); but does not explicitly disclose initiating communication of the information by transmitting all of the complementary information.

Bantz, however, discloses initially transmitting all of the complementary information to the target equipment (Column 3, lines 46-51; providing maximum service level, corresponding to all complementary information, for a limited period of time); and

Decreasing, over time, the amount of complementary information being transmitted to the target equipment (Column 3, line 66 to Column 4, line 11; gradually reducing the user's rights and, thus the amount of complementary information, over time). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the selective and quantitative rights management system of Bantz into the scalable media delivery system of Kalra as modified by Buxton in order to entice a user to renew or purchase a service or piece of data by gradually decreasing the quality of data that the user receives until such purchase or renewal is provided.

Regarding Claim 61,

Claim 61 is a system claim that corresponds to method claim 55 and is rejected for the same reasons.

7. Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra in view of Buxton, further in view of DeLeon (U.S. Patent Application Publication 2002/0064285).

Kalra as modified by Buxton does not explicitly disclose an audio coder, coupled to the audio information server, and configured to accept an analog audio stream and to convert the analog audio stream to a digital audio stream to be used by the audio information server as the original audio stream.

DeLeon, however, discloses an audio coder, coupled to the audio information server, and configured to accept an analog audio stream and to convert the analog audio stream to a digital audio stream to be used by the audio information server as the original audio stream (Abstract; and Paragraphs 23 and 32). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the analog/digital conversion system of DeLeon into the scalable media delivery system of Kalra as modified by Buxton in order to allow the system to transmit media in a digital and compressed format, even if the input media is analog, thereby providing high quality audio while conserving bandwidth.

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8. Claims 67 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra in view of Buxton, further in view of Yoon (U.S. Patent Application Publication 2003/0061239).

Regarding Claim 67,

Kalra as modified by Buxton does not explicitly disclose means for coupling a smart card to the synthesis system.

Yoon, however, discloses means for coupling a smart card to the synthesis system (Paragraphs 32-36). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the user profile system of Yoon into the scalable media delivery system of Kalra as modified by Buxton in order to allow the system to securely store the profile on a smart card of the user, provide additional information within the profile with respect to preferences, history of usage, and authorization, and/or to ensure that the user is authorized to access content before allowing access to such content.

Regarding Claim 68,

Kalra as modified by Buxton and Yoon discloses the apparatus of claim 67, in addition, Kalra discloses that the data profile to be used to determine a quantity of complementary information to be received by the apparatus (Abstract; and Column 3, line 66 to Column 4, line 59); and Yoon discloses that smart card is configured with a data profile (Paragraphs 32-36).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY D. POPHAM whose telephone number is (571)272-7215. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey D Popham  
Examiner  
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